

ABSTRACT

An electric automobile is provided on which a hydrogen generating device which can supply hydrogen easily to a hydrogen storing means and can generate a hydrogen-containing gas at a low temperature is loaded.

An electric automobile provided with a fuel cell (30) for power generation by supply of hydrogen and oxidizing agent, a hydrogen generating device (10) for generating a gas containing hydrogen to be supplied to the fuel cell, and a motor driven by electricity generated by the fuel cell, characterized in that the hydrogen generating device is to generate a gas containing hydrogen by decomposing a fuel containing an organic compound, comprising a partition membrane (11), a fuel electrode (12) provided on one surface of the partition membrane, means (16) for supplying a fuel containing the organic compound and water to the fuel electrode, an oxidizing electrode (14) provided on the other surface of the partition membrane, means (17) for supplying an oxidizing agent to the oxidizing electrode, and means for generating and collecting the gas containing hydrogen from the fuel electrode. There are cases: (1) the hydrogen generating device is an open circuit having neither means for withdrawing electric energy to outside from a hydrogen generating cell constituting the hydrogen generating device, nor means for providing electric energy from outside to the hydrogen generating cell; (2) the hydrogen generating device has means for withdrawing

electric energy to outside with the fuel electrode serving as a negative electrode and the oxidizing electrode as a positive electrode; and (3) the hydrogen generating device has means for providing electric energy from outside with the fuel electrode serving as cathode and the oxidizing electrode as anode.